

S193460



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D6030-140
Job Sheet 191800



DAS
13
9-89

Part No: D6030-140

Job Qty: 11 pcs

Part Name: Tube, Seamless



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 3/8/19

Job Tracking No:

Due Date: 6/30/19

Created By: Steven Hemmerich

Type: Stock

Description:

Note: TBD D6030 REV.A IPP REV:A 17.12.14 NEW ISSUE DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	11 pcs	6/30/19	6/30/19	0.00	0.00	Purchasing - 1	DAS	JUN 2 5 2019
							Purchasing - 2	81	
							Purchasing - 3	9-89	
110	Packaging 2-1 - Receive - B4B	11 pcs	6/30/19	6/30/19	0.00	0.00	Packaging 2 - 1 - B4B		
							Packaging 2 - 2 - B4B		
							Packaging 2 - 3 - B4B		
							Packaging 2 - 5 - B4B		
							Packaging 2 - 4 - B4B		
							Packaging 2 - 6 - B4B		
							Packaging 2 - 7 - B4B		
							Packaging 2 - 8 - B4B		
							Packaging 2 - 9 - B4B		
							Packaging 2 - 10 - B4B		
							Packaging 2 - 11 - B4B		
							Packaging 2 - 12 - B4B		
							Packaging 2 - 13 - B4B		
							Packaging 2 - 14 - B4B		
							Packaging 2 - 15 - B4B		
							Packaging 2 - 16 - B4B		
							Packaging 2 - 17 - B4B		
							Packaging 2 - 18 - B4B		
							Packaging 2 - 19 - B4B		
							Packaging 2 - 20 - B4B		
							Packaging 2 - 21 - B4B		
							Packaging 2 - 22 - B4B		
							Packaging 2 - 23 - B4B		
							Packaging 2 - 24 - B4B		
							Packaging 2 - 25 - B4B		
							Packaging 2 - 26 - B4B	DAS	
							Packaging 2 - 27 - B4B	81	
							Packaging 2 - 28 - B4B	9-89	JUN 2 5 2019

Plex 3/8/19 12:54 PM dart.hemmerich.stever

					Packaging 2 - 29 - B4B	
					Packaging 2 - 30 - B4B	
					Packaging 2 - 31 - B4B	
					Packaging 2 - 32 - B4B	
					Packaging 2 - 33 - B4B	
					Packaging 2 - 34 - B4B	
					Packaging 2 - 35 - B4B	
					Packaging 2 - 36 - B4B	
120 QC 18	11 pcs	6/30/19	0.00 0.00		QC 18 - 12	
					QC 18 - 14	
					QC 18 - 22	
					QC 18 - 25	
					QC 18 - 42	
					QC 18 - 48	
					QC 18 - 58	
					QC 18 - 61	
					QC 18 - 9	
140 Packaging 3-1 - Stock - B4B	11 pcs	6/30/19	0.00 0.00		Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
150 QC 21 - SA	11 pcs	6/30/19	0.00 0.00		QC 21 - SA - 21	
					QC 21 - SA - 70	
					QC 21 - SA - 53	

DAS
81
9-89

JUN 25 2019

BD 6-28-2019

DAS
21
9-89

JUL 02 2019

Part Op 100 - Issue P/O 42753 (D6030-140) A) Extrude crosstube material as per Dwg D6030 *****EXTREME CARE
 Descriptions: MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE
 SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. *****MUST BE

WELL PACKAGE, IF NOT IT WILL BE REFUSE*** C OF IS REQUIRED

110 - (Receive & Inspect for Damage & Mat'l Certs), Ensure material certification is attached

120 - (QC18 In-Coming Inspection Material), Ensure Material certification comply to Dwg D6030

140 - (Identify as per dwg & Stock Location:_____)

150 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D6030-140P	Tube, Seamless	11 Ea (1 ea)	100-Purchasing	5193367

Job Allocations

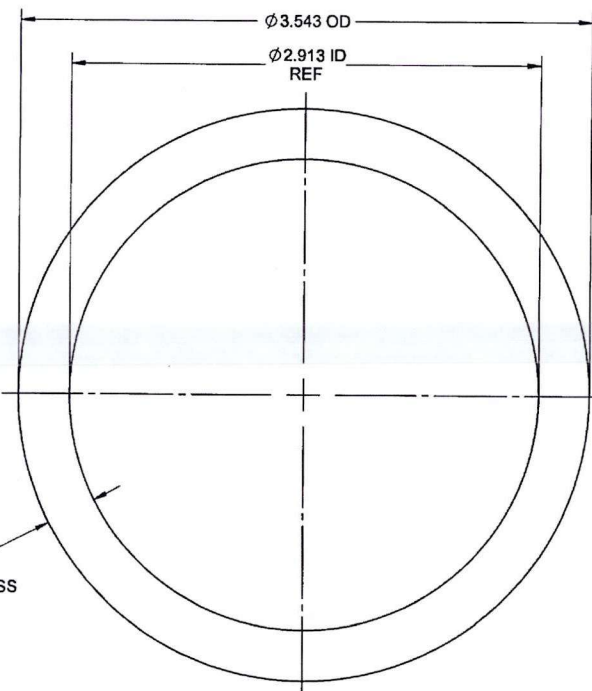
Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	D6030-140P	11	0	0

Part Specifications

Specifications could not be found.

Plex 3/8/19 12:54 PM dart.hemmerich.steven

SPECIFICATION CONTROL DRAWING



0.315 WALL THICKNESS

D6030-XXX TUBE, SEAMLESS

WHERE XXX IS LENGTH IN INCHES
EG. 140" LONG TUBE: D6030-140

NOTES:

1) MATERIAL: 3.543 OD X 0.315 WALL 7075-T73/T73510/T73511 (WW-T-700/7) OR ASTM B210)
DRAWN SEAMLESS ALUMINUM TUBE.
MINIMUM ULTIMATE TENSILE STRENGTH = 66 KSI
MINIMUM YIELD TENSILE STRENGTH = 56 KSI
MINIMUM ELONGATION = 12%

2) FINISH: NONE

3) TOLERANCES: PER ANSI H35.2 AND AS FOLLOWS:
O.D.: +/- 0.008 MEAN (+/- 0.016 INCLUDING OVALITY)
WALL: +/- 0.015 MEAN (+/- 0.0312 INCLUDING ECCENTRICITY)
LENGTH: XXX +0.500/-0.000
STRAIGHTNESS: 0.010" DEVIATION / 12" LENGTH
DENTS: PER NOTE 8 BELOW

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: N/A

6) IDENTIFICATION: NONE

7) WEIGHT: N/A

8) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE.
THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS
SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY.
CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.

DAS
81
9-89

RELEASED

2018 OCT 02
By 18-117

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	ZF	17.12.04
DESIGN	ML		
DRAWN	ZF		
CHECKED	MW		
MFG. APPR.	JFS		
APPROVED	NO		
DE APPR.	CP		
DATE	17.12.04		

APPROVED

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO.

D6030

TITLE

TUBE, SEAMLESS

REV. A

SHEET 1 OF 1

SCALE

NTS

COPYRIGHT © 2017 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE LTD



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO042753



Supplier: ALU001-VU
Aluminiumwerk Unna AG
630-3033 SOUTH PARKER RD
AURORA, CO 80014 USA
Phone: 303 755 5672
Fax: 303 755 5936

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO042753

PO Date: 2/28/19

Due Date: 7/31/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Phone:

Via: Ground

Pynt Terms: Net 30

Freight Terms:

Special Comments: *****EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE

SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS.*****

MUST BE WELL PACKAGE, IF NOT IT WILL BE REFUSE

C OF IS REQUIRED

Items

Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	491797 191800	D6030-140P			Tube, Seamless EXTRUDE AS PER DWG D6030 REV. A3 B169645	Firmed	-	7/31/19	11 Ea	17 0 Ea 17 PCS	11 Ea	\$838.20/Ea	\$9,220.20
Grand Total:													\$9,220.20

DAS JUN 24 2019
81
9-89

Order Notes

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable). No Raw Metals from China or Soviet Bloc Countries

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program.

A049 supplier awareness.

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 3/8/19 11:38 AM dart.hemmerich.steven

Packing List Aluminiumwerk Unna AG

Page 1 of 1



Order				Article				Box marking				
Commission-No.:	75923			Outer Diameter (Inch):	3,543			DART AEROSPACE P.O. P0042753 / D6030-140P MADE IN GERMANY DEST.: HAWKESBURY ONT, CANADA				
Item No.:	100			Inner Diameter (Inch):	2,913							
Customer PO:	P0042753			Wall (Inch):	0,315							
Customer:	Dart Aerospace			Length (Feet):	11,67							
Date:	12.06.2019			Drawing:	89,99 x 8							
Comments:	We hereby declare, that the wooden packing material are totally free from bark and apparently free from live plant pests.											
Box No.	Boxdimensions				Total number of pieces and weights				Cast/Heat-Groups in the box			
	Length (Inch)	Width (Inch)	Height (Inch)	Volume (cbm)	Pieces	Net lbs	Tare lbs	Gross lbs	Position	Pieces	Cast-No.	Heat-No.
1	151,575	22,441	22,441	1,251	17	773,822	232,587	1006,409		17	89221	1404210
Total:				1,251	17	773,822	232,587	1006,409		17		

DAS
81
9-89

Abnahmeprüfzeugnis 3.1 - DIN EN 10204:2005

Inspection Certificate 3.1 - DIN EN 10204:2005 / Certificat de Reception 3.1- DIN EN 10204:2005

Kunde: Dart Aerospace Ltd.
Client:

Zeugnisnummer: 1405/19
Cert No. / No. du certificat:

1270 Aberdeen Street
K6A1K7 Hawkesbury, ON Canada

Bestellnummer: P0042753
Order No. / No. de commande

Produkt: Rohre nahtlos gepresst und gezogen
Product / Produit: Tubes seamless extruded and drawn

Auftrag: 75923/100

Spezifikation: AMS - WW - T - 700/7B; Spezifikation Dart Aerospace (mechanical properties T 73511)

Our Reference/Notre Reference:

Specification:

Werkstoff: 7075
Alloy/Alliage:

Zustand: T 73511
Temper/État:

Abmessung: 3,543 INCH x 2,913 INCH x 0,315 INCH x 140,000 INCH
Size / Dimension: D6030-140P

Kennzeichnung ALUnna - Cert No. 1405/19 - AMS-WW-T-700/7(B) - 3.543" OD x 0.315" WT - 7075 - T 73511 - Cast No. 89221 - Heat Lot No.
Marking/Marquage: 1404210 - ALUnna Order Confirmation No. 75923/100

Lieferung: pcs. lbs
Delivered Material / Matériel délivré: 17 774
Country of Manufacture: Germany
Products are in accordance with applicable RoHS

Charge/ Cast No.		1. Chemische Analyse										Chemical Analysis / analyse chimique					Other elements each max. 0,05 %, total 0,15 %				
		Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Zr	Bi	Sn	Ni	Na						
min.				1,2		2,1	0,18	5,1													
max.		0,40	0,50	2,0	0,30	2,9	0,28	6,1	0,20												
89221		0,07	0,16	1,56	0,05	2,52	0,20	5,97	0,04					0,0001							

Hydrogen content: 0,06 ccm/100 g Al Elements without indication < 0,01 % country of melt manufacturer: Germany

2. Mechanische Eigenschaften Mechanical Properties / Valeurs Mécaniques

Anforderungen Requirements	tensile (Rm) ksi	yield (Rp0,2) ksi	elongation 2" %	elongation A %	Hardness HB	Heat Lot No.
	66,0	56,0	12,0			
1	74,6	64,3	15,4			1404210
2	73,4	63,0	15,1			

RMS 25 - max. 17,2 µ"

Ergebnis der Prüfungen: Es wird bestätigt, daß die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellannahme entspricht

Test results: We confirm that the delivery has been tested and applies to the agreements made on receipt of the order
Resultats: Nous confirmons que la livraison a été contrôlée et correspond avec les conventions faites à la réception de la commande

mergardtri

13.06.2019

Certified acc. DIN EN ISO 9001:2015 and DIN EN 9100:2016
valid until 2019-11-10
TÜV Nord - Cert.- Req. No.: 44 100 131576 and 44 117 131576
Aluminiumwerk Unna AG, Uelzener Weg 36, 59425 Unna, Germany

 **ALUnna**
Abnahmebeauftragter

DAS
81
9-89

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: D6030-140

PO / BATCH NO.: P004 2753/

DATE: JUN 2 5 2019

5193367

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 3.5" 0

QUANTITY RECEIVED: 17 pcs

THICKNESS RECEIVED: 3.5" 0

QUANTITY INSPECTED: 17 pcs

SHEET SIZE ORDERED: -

QUANTITY REJECTED: X

SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<u>N</u>	
CORRECT FINISH	Y	<u>N</u>	
CORROSION	<u>N</u>	<u>N</u>	
CORRECT GRAIN DIRECTION	Y	<u>N</u>	
CORRECT MATERIAL PER M-DRAWING	Y	<u>N</u>	<u>AMS-WW-T-700</u>
CORRECT THICKNESS	Y	<u>N</u>	
PHOTO REQUIRED	Y	<u>N</u>	
CORRECT REF # TO LINK CERT	Y	<u>N</u>	<u>LT: 1404210</u>
CORRECT MATERIAL IDENTIFICATION	Y	<u>N</u>	
CORRECT M# ON THE MATERIAL	Y	<u>N</u>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<u>N</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<u>N</u>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 6</u> DATE: <u>JUN 2 5 2019</u>	DAS 81 9-89	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in